ATTACHMENT J1 (REVISED UNDER AMENDMENT 0014)

Fort Hood Electric Distribution System

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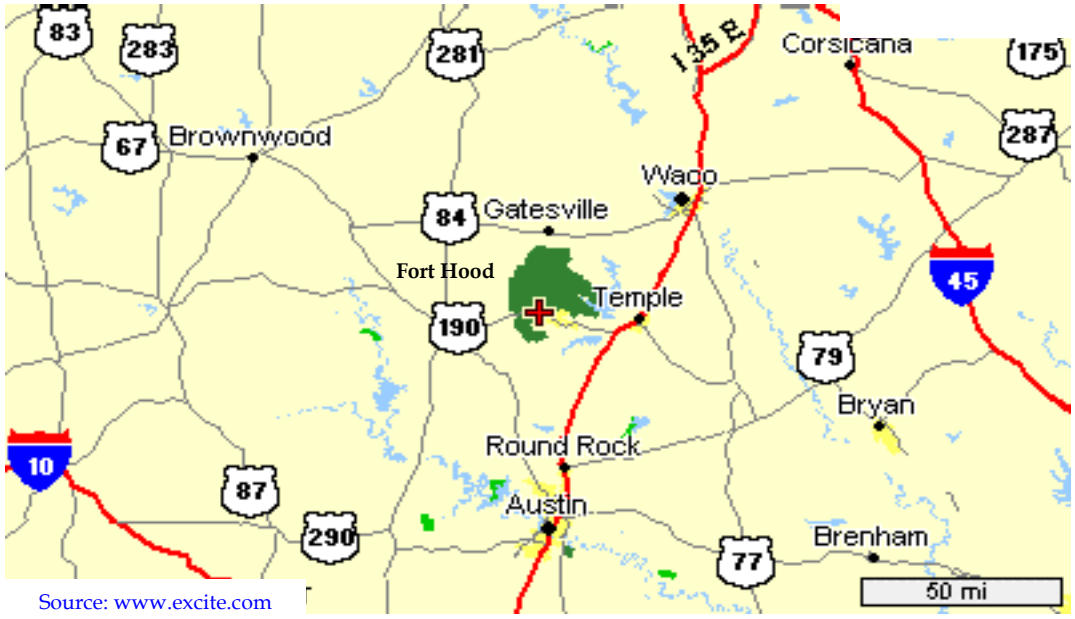
J1 Fort Hood Electric Distribution System

J1.1 Fort Hood Overview

Fort Hood is located in central Texas, approximately 65 miles north of Austin and approximately 20 miles west of Interstate Highway 35 along U.S. Highway 190. **Figure 1** shows Fort Hood's location in central Texas. The Post covers approximately 339 square miles, straddling Coryell and Bell counties and abutted to the east by the City of Killeen, Texas and to the west by the City of Copperas Cove, Texas.

FIGURE 1
Fort Hood, Texas
Electric Distribution System, Fort Hood, Texas

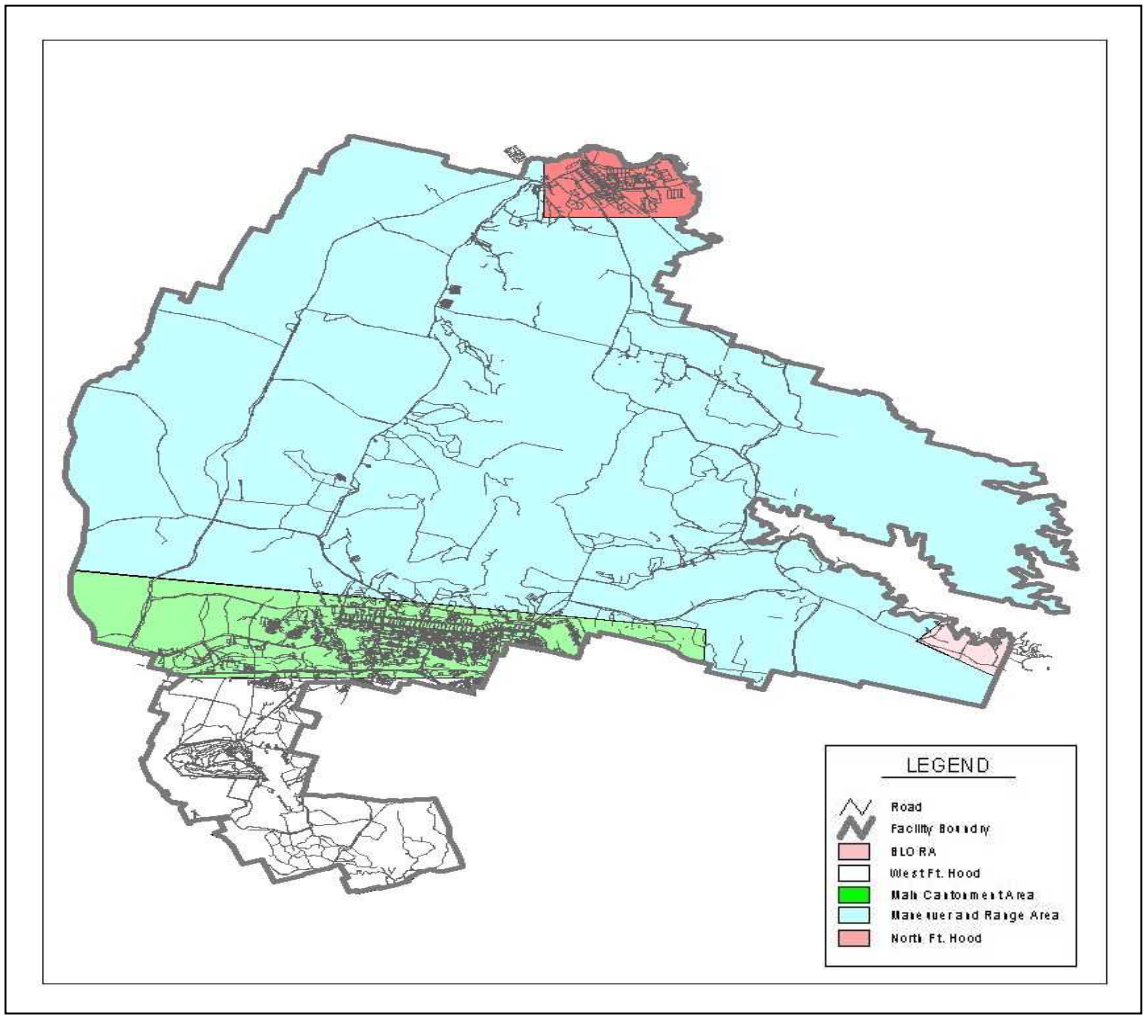


Fort Hood consists of the Main Cantonment area, West Fort Hood, North Fort Hood, maneuver and live-training areas (the Ranges), and the Belton Lake Outdoor Recreation Area (BLORA). These areas are depicted in **Figure 2**. The Main Cantonment area represents the original site for South Camp Hood. The site was originally selected in 1941 and construction started 1942. Construction of North Camp Hood, which is now known as North Fort Hood, started shortly thereafter and approximately 17 miles to the north. South Camp Hood was designated as Fort Hood in 1951. Approximately 244 square miles of land between North Fort Hood and the Main Cantonment area is used for maneuvers and live

fire exercises. Fort Hood has two active airfields: Hood Army Airfield and Robert Gray Airfield. Hood Army Airfield is located on the eastern edge of the Cantonment area and Robert Gray Airfield is located on West Fort Hood. BLORA is located on the eastern most portion of Fort Hood.

Fort Hood's primary mission is to prepare both active and reserve military components for deployment and execution of military and domestic missions worldwide. The Post is distinctive in that it is the only military installation in the United States capable of stationing and training two armored divisions. A major element of Fort Hood's mission is derived from its extensive training areas. The maneuver and training areas within the Ranges are used to simulate battlefield conditions and support infantry, armor, artillery, and air training operations.

FIGURE 2
Major Areas of Fort Hood, Texas
Electric Distribution System, Fort Hood, Texas



J1.2 Electric Distribution System Description

J1.2.1 Electric Distribution System Fixed Equipment Inventory

The Fort Hood electric distribution system consists of all appurtenances physically connected to the distribution system from the point in which the distribution system enters the Installation and Government ownership currently starts to the point of demarcation, for each end user. The system may include, but is not limited to, transformers, circuits, protective devices, utility poles, ductbanks, switches, street lighting fixtures, and other ancillary fixed equipment. The actual inventory of items sold will be conveyed to the Contractor using the Bill of Sale shown in Attachment J42 to the RFP at the time the system is transferred.

The following description and inventory is included to provide the Contractor with a general understanding of the size and configuration of the distribution system. The description and inventory were developed based on best available data.

The Offeror shall base its proposal on site inspections, information in the technical library, and other pertinent information, as well as the following description and inventory. If after award the Offeror identifies additional inventory not listed in section J1.2.1.3, the Offeror may submit to the Contracting Officer a request for an equitable adjustment. If the Offeror determines that the inventory listed in section J1.2.1.3 is overstated, the Offeror shall report the extent of the overstatement to the Contracting Officer, who will determine an equitable adjustment.

J1.2.1.1 Description

The electric distribution system at Fort Hood is used to deliver electricity from the supplier to each end user throughout the Post. The system serves approximately 4,889 facilities on the Main Cantonment area, 324 facilities on West Fort Hood, 305 facilities on North Fort Hood, and 33 facilities at BLORA. The electric system also supports the range and maneuver areas.

Fort Hood's electric distribution consists of primary and secondary circuits that are both overhead on utility poles and underground in concrete encased conduit or direct buried. The distribution system is constructed with loop capability to provide backup in the event of feeder outages. The primary distribution system includes voltage regulator stations, which are located in the Main Cantonment area and West Fort Hood, as well as a small number of capacitor banks. Other major system components include substations, transformers, utility poles, utility manholes, lights, meters, and switches.

Specifically excluded from privatization of the electric distribution system are:

- Airfield lighting
- Emergency generators connected to facilities

J1.2.1.1.1 Main Cantonment Substation

The Main Cantonment substation is located at the intersection of Hood Road and Tank Destroyer Boulevard. Texas Utilities (TXU)-owned transformers in the substation transform the energy to the Fort Hood 12.47-kV 3-phase 4-wire distribution system. The station is an

open-air insulated design utilizing a main and transfer bus configuration. Sixteen feeders emanate from the substation. The point of demarcation between the TXU and Fort Hood systems is the supply side of the totalizing breaker located between the TXU-owned transformers and the Fort Hood feeder breakers.

J1.2.1.1.2 West Fort Hood Substation

The West Fort Hood substation (also known as the Clear Creek substation) is located southeast of the Montague II military family housing area along Ammo Road. Like the Main Cantonment substation, TXU-owned transformers in the substation transform the energy to the Fort Hood 12.47-kV 3-phase 4-wire distribution system. The station is an open-air insulated design utilizing a main and transfer bus configuration. The eight circuits emanating from the station serve facilities on West Fort Hood and the west side of the Main Cantonment area. The point of demarcation between the TXU and Fort Hood systems is the supply side of the totalizing breaker located between the TXU-owned transformers and the Fort Hood feeder breakers.

J1.2.1.1.3 North Fort Hood Substation

The North Fort Hood is located at the corner of 15th Street and Headquarters Avenue. It has three circuit breakers, which feed circuits out of the station through overhead lines. These circuits primarily feed those facilities to the far northern portions of the Post. This substation is of the same design as the Main Cantonment and West Fort Hood substations. The point of demarcation between the TXU and Fort Hood systems is the disconnect switch between the TXU-owned totalizing breaker and the Fort Hood feeder breakers.

J1.2.1.2 Electric Distribution System Points of Demarcation

The Fort Hood electric distribution system being studied consists of all components from the point where the Post takes ownership from the supplier to the point where electricity is supplied to end-users. The beginning point of demarcation at each of the Fort Hood substations is defined in sections J1.2.1.1.1 through J1.2.1.1.3. The point of demarcation for each end user is defined as the point or component on the distribution system where ownership changes from the utility owner to the building owner. In most cases the point of demarcation is the first upstream component (i.e., meter, main panel, main breaker, disconnect switch, junction box, etc.) on the system located outside of the facility footprint. **Table 1** identifies the type of service and general location of the point of demarcation with respect to the building or facility served by the distribution system.

TABLE 1
Electric Distribution System Points of Demarcation
Electric Distribution System, Fort Hood, Texas

Point of Demarcation	Applicable Scenario	Sketch

TABLE 1
Electric Distribution System Points of Demarcation
Electric Distribution System, Fort Hood, Texas

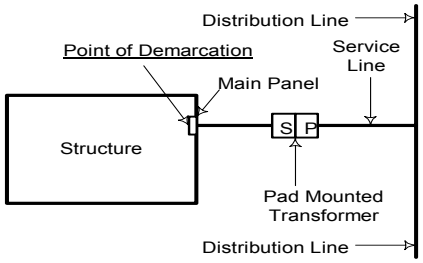
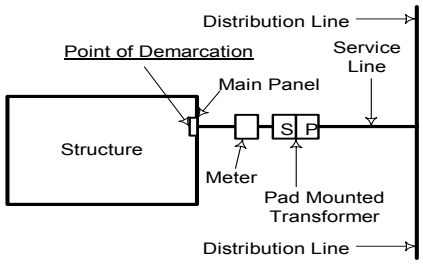
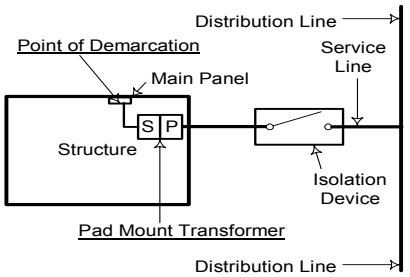
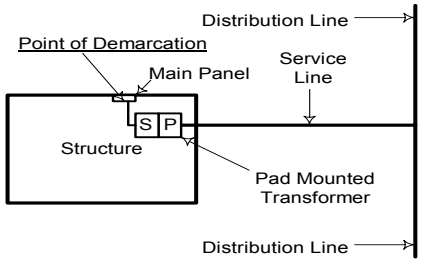
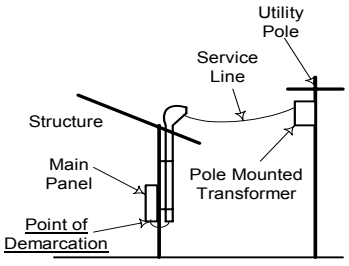
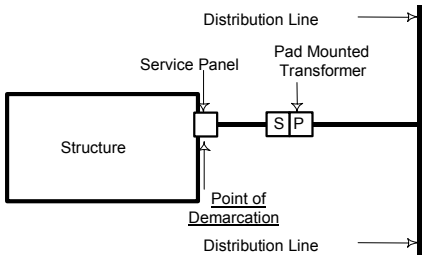
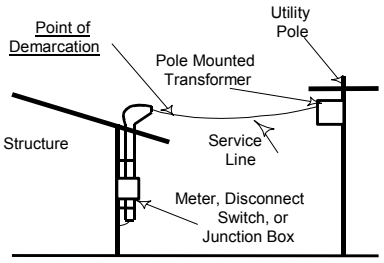
Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the line side of the main panel in the structure. *Note: Disconnect switch may be installed at the structure at any time. Disconnect switch will become the point of demarcation.*	Pad-mounted transformer located outside of structure with underground service to the structure and no meter exists.	
Point of demarcation is the line side of the main panel in the structure. *Note: Disconnect switch may be installed at the structure at any time. Disconnect switch will become the point of demarcation.*	Three Phase CT metered service.	
Point of demarcation is the line side of the main panel in the structure.	Transformer located inside of structure and an isolation device is in place with or without a meter. Note: Utility owner must be granted 24-hour access to transformer room.	
Point of demarcation is the line side of the main panel in the structure.	Transformer located inside of structure with no isolation device in place. Note: Utility owner must be granted 24-hour access to transformer room.	
Point of demarcation is the line side of the main panel in the structure. *Note: Disconnect switch may be installed at any time. Disconnect switch will become the point of demarcation.*	Pole-mounted transformer located outside of structure with secondary attached to outside of structure with no meter.	

TABLE 1
Electric Distribution System Points of Demarcation
Electric Distribution System, Fort Hood, Texas

Point of Demarcation	Applicable Scenario	Sketch
Point of demarcation is the point at which the electrical service conductor is connected to the building service entrance panel. *Note: Point of demarcation for residential services is complimentary to the point of demarcation established by Fort Hood Family Housing initiative. All components of the electrical distribution system not included as a part of the residence are included with electrical distribution included for privatization.*	Residential service connected to underground secondary line.	
Point of demarcation is the point at which the electrical service conductor is connected at the weatherhead to the building service conductor. *Note: Point of demarcation for residential services is complimentary to the point of demarcation established by Fort Hood Family Housing initiative. All components of the electrical distribution system not included as a part of the residence are included with electrical distribution included for privatization.*	Residential service connected to overhead secondary line.	

Note:
All electric meters, including instrumentation, wiring, CTs, PTs, etc., will be transferred with the electrical distribution system to the Contractor.

J1.2.1.3 Inventory

Electric Distribution Circuits

The electric distribution system consists of primary and secondary distribution circuits. Each circuit contains conductors and neutrals, with the predominate circuit construction being three conductors and one neutral. A detailed inventory of the electric distribution system circuits is shown in **Table 2**. The table shows the combined total linear footage of conductors and neutrals. For example, a 100-ft cable consisting of 3 No. 4 copper conductors and 1 No. 4 copper neutral would be entered in the inventory as 400 ft of No. 4 copper cable.

TABLE 2
Electric Distribution System Cable Summary
Electric Distribution System, Fort Hood, Texas

Cable [a]	Size [b]	1975	1985	1995	2000	Grand Total
			Values reported are total linear feet			
OH, ACSR	No. 6	5,815	1,124	8,661	0	15,600
	No. 4	120,909	187,476	47,576	0	355,961
	No. 2	19,291	77,646	30,780	0	127,717
	No. 1	554	2,602	2,028	0	5,184
	No. 1/0	13,024	90,024	8,805	6,966	118,819
	No. 2/0	29,035	60,578	2,038	4,622	96,273
	No. 3/0	0	7,813	205	0	8,018
	No. 4/0	110,852	466,995	123,627	16,088	717,562
	477_MCM	246,469	1,320,251	348,018	96,366	2,011,104
OH, ACSR Total		545,949	2,214,509	571,738	124,042	3,456,238
OH, Aluminum	No. 6	2,997	26,210	286	236	29,729
	No. 4	1,116	272,328	1,685	0	275,129
	No. 2	1,498	393,486	1,613	0	396,597
	No. 1	0	4,025	0	0	4,025
	No. 1/0	1,393	36,781	128	0	38,302
	No. 2/0	976	43,244	1,497	0	45,717
	No. 3/0	306	4,455	0	0	4,761
	No. 4/0	3,419	61,509	2,328	0	67,256
	477_MCM	0	2,359	0	0	2,359
OH, Aluminum Total		11,705	844,397	7,537	236	863,875
OH, Copper	No. 6	52,782	747,786	40,534	6,007	847,109
	No. 4	47,526	1,047,762	34,360	1,952	1,131,600
	No. 2	5,057	530,133	15,553	0	550,743
	No. 1	0	15,013	0	0	15,013
	No. 1/0	1,994	149,415	5,075	0	156,484
	No. 2/0	1,706	31,675	2,981	0	36,362
	No. 3/0	0	18,704	0	0	18,704
	No. 4/0	6,585	101,473	5,473	0	113,531
	477_MCM	0	2,255	0	0	2,255
OH, Copper Total		115,650	2,644,216	103,976	7,959	2,871,801

TABLE 2
Electric Distribution System Cable Summary
Electric Distribution System, Fort Hood, Texas

Cable [a]	Size [b]	1975	1985	1995	2000	Grand Total
			Values reported are total linear feet			
UG, Aluminum	No. 6	1,088	49,481	19,240	0	69,809
	No. 4	1,873	40,158	935	0	42,966
	No. 2	26,837	57,431	7,505	0	91,773
	No. 1	1,870	1,144	1,837	0	4,851
	No. 1/0	130,933	102,190	1,658	0	234,781
	No. 2/0	114,903	14,466	144,757	0	274,126
	No. 3/0	80,664	33,665	5,795	0	120,124
	No. 4/0	20,532	3,263	1,111	0	24,906
	477_MCM	7,769	17,886	4,820	0	30,475
UG, Aluminum Total		386,469	319,684	187,658	0	893,811
UG, Copper	No. 6	13,029	123,322	7,435	580	144,366
	No. 4	4,052	73,718	293	0	78,063
	No. 2	13,502	203,216	20,930	26,774	264,422
	No. 1	35,174	597,106	70,249	7,295	709,824
	No. 1/0	32,643	67,742	11,632	4,798	116,815
	No. 2/0	21,984	46,478	8,731	561	77,754
	No. 3/0	804	34,469	2,019	13,970	51,262
	No. 4/0	40,077	39,265	1,812	3,983	85,137
	477_MCM	36,944	113,029	12,531	3,321	165,825
UG, Copper Total		198,209	1,298,345	135,632	61,282	1,693,468
UG, UNKNOWN [c]	UNKNOWN	0	1,810,723	0	0	1,810,723
Grand Total		1,257,982	9,131,874	1,006,541	193,519	11,589,916

Notes:
[a] Overhead and underground cables are shown in this table as OH and UG respectively. Underground cables are normally encased in ductbanks; however, there are some areas where underground cables are direct buried.
[b] Sizes smaller than No. 6 are included in the No. 6 inventory entries. Sizes larger than No.4/0 are included in the 477_MCM inventory entries. Size No. 3 is included in the No. 2 inventory entries.
[c] The unknown secondary underground represents circuits in the ranges. These circuits were estimated to be comprised of one conductor and one neutral.

Transformers, Voltage Regulators and Switches

The electric distribution system on Fort Hood also includes pad and pole-mounted transformers, voltage regulators and switches. **Table 3** provides an inventory of the electric distribution system transformers, voltage regulators and switches.

TABLE 3
Electric Distribution System Switches, Transformers and Voltage Regulators
Electric Distribution System, Fort Hood, Texas

Component Type	Rating/Size/Type	1975	1980	1985	1995	2000	Grand Total
		Values reported are total number of items					
Switch	Pad_Mount, OIL	0	0	4	2	0	6
	Pole_Mount, FCO	244	0	280	46	8	578
	Pole_Mount, GANG	29	0	106	6	1	142
	Pole_Mount, OIL	3	0	0	0	1	4
	Pole_Mount, RECLOSER	0	0	1	0	0	1
	Pole_Mount, SOLID_BLADE	7	0	31	0	1	39
Switch Total		283	0	422	54	11	770
Transformer	Pad_Mount, 10 KVA	0	0	1	0	0	1
	Pad_Mount, 100 KVA	0	10	0	0	8	18
	Pad_Mount, 1000 KVA	0	0	7	5	0	12
	Pad_Mount, 112.5 KVA	0	1	20	4	1	26
	Pad_Mount, 15 KVA	0	0	5	0	0	5
	Pad_Mount, 150 KVA	0	0	25	8	0	33
	Pad_Mount, 1500 KVA	0	0	4	1	0	5
	Pad_Mount, 167 KVA	0	49	0	0	12	61
	Pad_Mount, 2000 KVA	0	0	1	3	0	4
	Pad_Mount, 225 KVA	0	1	68	20	1	90
	Pad_Mount, 25 KVA	0	0	9	0	0	9
	Pad_Mount, 250 KVA	0	0	1	1	0	2
	Pad_Mount, 2500 KVA	0	0	2	2	0	4
	Pad_Mount, 300 KVA	0	0	54	24	0	78
	Pad_Mount, 3215 KVA	0	0	0	2	0	2
	Pad_Mount, 37.5 KVA	0	13	4	0	0	17
	Pad_Mount, 45 KVA	0	0	2	0	0	2
	Pad_Mount, 50 KVA	0	45	2	0	1	48
	Pad_Mount, 500 KVA	0	1	69	21	1	92

TABLE 3
Electric Distribution System Switches, Transformers and Voltage Regulators
Electric Distribution System, Fort Hood, Texas

Component Type	Rating/Size/Type	1975	1980	1985	1995	2000	Grand Total
		Values reported are total number of items					
Transformer (cont.)	Pad_Mount, 675 KVA	0	0	1	0	0	1
	Pad_Mount, 75 KVA	0	111	24	3	11	149
	Pad_Mount, 750 KVA	0	0	28	5	0	33
	Pole_Mount, 10 KVA	0	4	283	64	2	353
	Pole_Mount, 100 KVA	0	0	91	38	0	129
	Pole_Mount, 15 KVA	0	6	517	107	22	652
	Pole_Mount, 25 KVA	0	0	617	181	12	810
	Pole_Mount, 333 KVA	0	0	3	0	0	3
	Pole_Mount, 37.5 KVA	0	0	285	117	5	407
	Pole_Mount, 5 KVA	0	0	23	3	0	26
	Pole_Mount, 50 KVA	0	0	380	250	5	635
	Pole_Mount, 75 KVA	0	0	193	99	0	292
Transformer Total		0	241	2,721	958	81	4,001
Voltage Regulator	1-Phase, 167 KVA	5	0	0	3	0	8
	3-Phase, 500 KVA	3	0	1	0	0	4
Voltage Regulator Total		8	0	1	3	0	12

Manholes, Poles, and Lighting

The electric distribution system on Fort Hood also includes manholes, utility poles, meters, and exterior and street lighting. **Table 4** provides an inventory of guy wires, light fixtures, riser poles, electric utility manholes, utility poles, and utility pole cross arms.

TABLE 4
Electric Distribution System, Manhole, Utility Pole, and Lighting Data
Electric Distribution System, Fort Hood, Texas

Component	Rating/Size/Type	1975	1985	1995	2000	Grand Total
		Values reported are total number of items				
Exterior Lighting	1,000 WATTS	69	412	6	0	487
	150 WATTS	669	4,706	920	58	6,353
	1,500 WATTS	0	10	0	0	10

TABLE 4
Electric Distribution System, Manhole, Utility Pole, and Lighting Data
Electric Distribution System, Fort Hood, Texas

Component	Rating/Size/Type	1975	1985	1995	2000	Grand Total
		Values reported are total number of items				
	250 WATTS	304	352	81	0	737
Exterior Lighting Total		1,042	5,480	1,007	58	7,587
Guy Wire	Down Guy	323	2,441	310	25	3,099
	Span Guy	62	467	59	5	593
Guy Wire Total		385	2,908	369	30	3,692
Riser Pole	Primary	213	201	44	8	466
	Secondary	72	390	11	1	474
Riser Pole Total		285	591	55	9	940
Utility Manhole	Handhole	0	0	9	0	9
	Junction_Box	3	28	18	0	49
	Manhole	77	472	54	1	604
	Pull_Box	6	138	5	0	149
Utility Manhole Total		86	638	86	1	811
Utility Meter	Various	37	298	91	1	427
Utility Pole	Class 1, 20 - 30 ft	2	31	0	0	33
	Class 1, 31 - 40 ft	2	14	0	0	16
	Class 1, 41 - 50 ft	1	46	0	0	47
	Class 1, 51 - 60 ft	0	2	0	0	2
	Class 2, > 60 ft	16	24	0	0	40
	Class 2, 20 - 30 ft	0	15	0	0	15
	Class 2, 31 - 40 ft	87	429	18	0	534
	Class 2, 41 - 50 ft	144	906	109	5	1,164
	Class 2, 51 - 60 ft	9	39	20	1	69
	Class 3, > 60 ft	1	14	0	0	15
	Class 3, 20 - 30 ft	3	130	0	0	133
	Class 3, 31 - 40 ft	61	691	63	1	816
	Class 3, 41 - 50 ft	111	679	29	6	825
	Class 3, 51 - 60 ft	9	113	4	0	126
	Class 4, > 60 ft	1	2	1	0	4
	Class 4, 20 - 30 ft	116	178	12	0	306

TABLE 4
Electric Distribution System, Manhole, Utility Pole, and Lighting Data
Electric Distribution System, Fort Hood, Texas

Component	Rating/Size/Type	1975	1985	1995	2000	Grand Total
		Values reported are total number of items				
	Class 4, 31 - 40 ft	280	2,381	181	34	2,876
	Class 4, 41 - 50 ft	82	1,367	425	41	1,915
	Class 4, 51 - 60 ft	2	113	62	0	177
	Class 5, 20 - 30 ft	4	421	6	1	432
	Class 5, 31 - 40 ft	25	1,092	72	3	1,192
	Class 5, 41 - 50 ft	184	74	8	2	268
	Class 5, 51 - 60 ft	0	1	0	0	1
	Class 6, 20 - 30 ft	0	64	0	1	65
	Class 6, 31 - 40 ft	2	14	2	0	18
	Class 6, 41 - 50 ft	0	2	0	0	2
	Class 7, 20 - 30 ft	0	10	0	0	10
	Unk class, > 60 ft	0	0	18	0	18
	Unk class, Unk height	279	1,880	334	14	2,507
Utility Pole Total		1,421	10,732	1,364	109	13,626
Utility Pole Fixture	Cross Arm	816	5,473	847	129	7,265

Tables 5, 6 and 7 detail the components in Main Cantonment, West Fort Hood, and North Fort Hood substations, respectively. Based on real property records, the estimated age of the Main Cantonment, West Fort Hood, and North Fort Hood substations are 1965, 1985, and 1986, respectively.

TABLE 5
Main Cantonment Substation Inventory
Electric Distribution System, Fort Hood Texas

Substation Component	Quantity	Unit
15 kV, 600A, Oil Circuit Breaker	16	ea
15 kV, 1200A, Oil Circuit Breaker	4	ea
1200A 14.4kV, Group Operated Air Switch	7	ea
600A 14.4kV, SPST switches (3)	48	ea
Potential Transformers 7200:120V	12	ea

TABLE 5
Main Cantonment Substation Inventory
Electric Distribution System, Fort Hood Texas

Substation Component	Quantity	Unit
2-1/2" Aluminum Bus	1,056	lf
2-1/2" Bus support insulators	114	ea
Suspension insulators	48	ea
1000MCM Cable terminator, Porcelain	48	ea
Terminator Supports	16	ea
Breaker bay steel support structure	16	unit
Breaker and support structure footing	20	ea
Switch support structures	4	ea
Station lighting	4	unit
Station Service Transformers 25 kVA	3	ea
Station fencing	252	lf
Station grounding	816	lf
Station Crushed gravel	146	cy
Control wiring conduit	2,560	lf
Control wiring	2,560	lf
Control Building	463	sf
Control building lighting	1	ls
Control building HVAC	1	ls
Cable tray	75	lf
Battery Charger	1	ea
Batteries and rack	1	ls
Station DC panel	1	ea
Breaker control panel (relays and switches)	11	ea
Station service AC panel	1	ea

TABLE 6
West Fort Hood Substation Inventory
Electric Distribution System, Fort Hood Texas

Substation Component	Quantity	Unit
15 kV, 1200A, Oil Circuit Breaker	7	ea
15 kV, 1200A, Vacuum Circuit Breaker	1	ea
15 kV, 2000A, Vacuum Circuit Breaker	2	ea
1200A 14.4kV, SPST switches (3)	16	ea
2000A 14.4kV, SPST switches (3)	4	ea
1200A 14.4kV, Group Operated Air Switch	8	ea
2000A 14.4kV, Motor Operated Air Switch	3	ea
2000A 14.4kV, Group Operated Air Switch	2	ea
Station Service Transformers 25 kVA	2	ea
Potential Transformers 7200:120V	6	ea
Station Class 9kV Surge Arrestors	24	ea
2-1/2" Aluminum Bus	1,071	lf
2-1/2" Bus support insulators	66	ea
1/2" X 3" Aluminum Flat Bar	176	lf
Suspension insulators	24	ea
Breaker bay steel support structure	8	unit
Switch steel support structure	2	unit
Breaker and support structure footing	10	ea
Station lighting	6	unit
Station fencing	400	lf
Station grounding	4,300	lf
Station Crushed gravel	370	cy
Control wiring conduit	1,280	lf
Control wiring	1,280	lf
Control Building	150	sf
Control building lighting	1	ls
Control building HVAC	1	ls
Battery Charger	1	ea
Batteries and rack	1	ls
Station DC panel	1	ea

TABLE 6
West Fort Hood Substation Inventory
Electric Distribution System, Fort Hood Texas

Substation Component	Quantity	Unit
Breaker control panel (relays and switches)	5	ea
Station service AC panel	1	ea

TABLE 7
North Fort Hood Substation Inventory
Electric Distribution System, Fort Hood Texas

Substation Component	Quantity	Unit
15 kV, 1200A, Oil Circuit Breaker	3	ea
1200A 14.4kV, SPST switches (3)	12	ea
1200A 14.4kV, Gang Operated Switch	1	ea
2-1/2" Aluminum Bus	183	lf
2-1/2" Bus support insulators	30	ea
1-1/4" Aluminum Bus	96	lf
Suspension insulators	21	ea
Breaker bay steel support structure	4	unit
Switch steel support structure	1	unit
Breaker and support structure footing	4	ea
Station lighting	2	unit
Station fencing	184	lf
Station grounding	824	lf
Station Crushed gravel	75	cy
Control wiring conduit	30	lf
Control wiring	30	lf

J1.2.2 Electric Distribution System Non-Fixed Equipment and Specialized Tools

Table 8 lists other ancillary equipment (spare parts), and **Table 9** lists specialized vehicles and tools included in the purchase. Offerors shall field verify all equipment, vehicles, and tools prior to submitting a bid. Offerors shall make their own determination of the adequacy of all equipment, vehicles, and tools.

TABLE 8
Spare Parts
Electric Distribution System, Fort Hood, Texas

Qty	Item	Make/Model	Description	Remarks
No spare parts are included with the Fort Hood electric distribution system				

TABLE 9
Specialized Vehicles and Tools
Electric Distribution System, Fort Hood, Texas

Qty	Item	Make/Model	Description	Remarks
No specialized vehicles or tools are included with the Fort Hood electric distribution system				

J1.2.3 Electric Distribution System Manuals, Drawings, and Records

Table 10 lists the manuals, drawings, and records that will be transferred with the system.

TABLE 10
Manuals, Drawings, and Records
Electric Distribution System, Fort Hood, Texas

Qty	Item	Description	Remarks
1	Drawing	CAD Drawing	Hard Copy
1	Electronic	CAD Drawing	Electronic Copy
1	Electronic Database	GIS Database	Electronic Copy
1	Report	Outage Report	Hard Copy

Note: Manuals, drawings, records, and reports included with the Fort Hood Electric Distribution System are included in the Bidders' Library.

J1.3 Specific Service Requirements

The service requirements for the Fort Hood electric distribution system are as defined in the Section C, *Description/Specifications/Work Statement*. The following requirements are specific to the Fort Hood electric distribution system and are in addition to those found in Section C. If there is a conflict between requirements described below and Section C, the requirements listed below take precedence over those found in Section C.

- Non-Government Installed Utilities Infrastructure. Prior to, during, and after award of this contract, the Residential Commercial Initiative Limited Partnership (Fort Hood Family Housing - FHFH) may cause new installation of utilities infrastructure from the

government existing Utility Systems to the Points of Demarcation of newly constructed housing units. The Contractor shall purchase this new construction, known as "Partnership Utility System Facilities" from FHFH as directed by Contracting Officer. After purchase, the Contractor shall then own, operate, expand, upgrade, maintain, repair, and replace the newly purchased infrastructure and serve the new housing areas to standards established by this contract. The Contractor shall purchase the fully completed Partnership Utility System Facilities and shall purchase the FHFH-contracted infrastructure following its construction and connection to the Contractor-owned system. Contractor shall complete payment for purchased infrastructure within sixty (60) days of written notice by the FHFH Partnership. The purchase and transfer of such property shall be per formal written agreement between the Contractor and FHFH. The Contractor shall take all necessary steps to transfer warranties obtained by the FHFH Partnership with respect to the Partnership Utility System Facilities; to the extent such warranties are assignable to the Contractor.

- Digging Permits. Contractor shall provide all digging permits which may impact on the integrity of his Utility Systems and the safety of the requestors. Contractor shall routinely accept and promptly process digging permit requests from Government work force; military units; FHFH partnership; maintenance, construction, and Army operations contractors; cable and phone maintenance and installation companies; fence rental companies; individual residents, and additional entities as identified by Contracting Officer to have a valid need for a digging permit. Contractor shall identify methodology of accepting, processing, approving, and listing reason(s) for disapproval.

- The Contractor shall obtain digging permits directly from the Fort Hood Department of Public Works (DPW) for utilities owned by the Government before any drilling, digging, or excavation is undertaken. Provide a completed form FHT 420-X10, Coordination for Land Excavation, to the DPW building 4612, Fort Hood, Texas for each permit. Allow 14 days for Government review of digging permit requests. A digging permit for a specified area of excavation expires 30 days after the issue date; Contractor must re-apply for a new permit to perform excavation in the area if the excavation was not started within the 30-day period. Permits will identify all underground utilities within 1,500 mm (5 feet) of the designated area. Contractor shall be responsible for all repairs, costs, and damages due to excavation.

- The Contractor shall coordinate with and obtain written approval from Fort Hood Range Control prior to performing any maintenance, repairs, construction, or other work on the electric distribution system in the Ranges (all areas managed and controlled by Fort Hood Range control).

- Exterior Lighting. The Contractor's ownership responsibility shall include streetlights, parking lot lights, high mast lights, other pole-mounted security lights, ball field lights, and other outdoor recreational facility lights. Pole mounted lights that are served by a circuit from a facility electrical panel are also included.

- For all privatized lighting fixtures, operations and maintenance of lighting fixtures includes the purchase and replacement of the lighting element and the removal and disposal of replaced lighting element.

- The Contractor shall coordinate with the Fort Hood DPW or equivalent agency as designated by the contracting officer any changes to the street lights or security lights that may affect blackout procedures during Government operations.
- All electric meters installed by the Contractor shall include demand registers unless otherwise agreed to by both parties.
- The Contractor shall own, operate, maintain, and calibrate all electric meters on Fort Hood. All new meters and replacement meters installed shall meet industry standard requirements for measuring electricity consumption and shall be connected to the Automatic Meter Reading (AMR) system unless otherwise agreed to by both parties. All new meters and replacement meters installed shall be tested to confirm successful connection and transmission of electricity consumption data to the AMR system. The Contractor shall provide all labor, equipment or materials necessary to install, connect, test, and calibrate meters.
- Fort Hood uses the AMR system to read meters located throughout Fort Hood. The Contractor shall operate, maintain, repair, and calibrate the AMR system in accordance with (IAW) manufacturer recommendation and/or maintenance schedule. The Contractor shall upgrade the AMR hardware, software and any ancillary or peripheral equipment necessary to ensure the system is compatible with Fort Hood's computer network, telephone, radio, or other applicable communication systems and to ensure the system is fully functional. The Contractor may propose changes to the AMR system, to include the replacement and installation of an equivalent or better system, as an alternative to upgrading the system. The Contractor shall provide all labor, equipment or materials necessary to operate, maintain, repair, upgrade, or replace the AMR system.
- The Contractor shall provide real time meter information for each feeder providing service to the Post. Real time meter information shall consist of current (amps), voltage (kV), power (kW) and power factor. Real time meter information shall be provided to Fort Hood through the AMR system. The contractor shall provide all labor, equipment or materials necessary to install, maintain, operate, repair, upgrade, or replace the meters used to provide real time meter information.
- The Contractor shall provide monthly meter reading reports IAW Paragraph J2.6, and that meet the following requirements:
  - The Contractor shall keep meter books with monthly consumption and demand (if applicable) for each meter reading. Meter books shall also include building address or facility number, meter number, previous month readings, current month readings, multipliers for each meter, total monthly consumption, points of contact for meter questions, and procedure for converting meter reads into consumption (including multipliers). The Contractor shall coordinate with the Government to determine the format for meter books to be delivered.
  - Commodities shall be metered for consumption, demand, run-time, or other measurement (including interval data such as 15-minute demand logging and specific electronic format) as directed by Contracting Officer. In the proposal, Contractor shall identify methodology of assigning initial and recurring costs to the

design, installation, operation (testing, calibrating, and reading), expansion, upgrade, repair and replacement of each meter type.

- Cost Allocation and Sales Rate Construction. In the proposal, the Contractor shall identify methodology for allocating appropriate cost associated with distinct services among customers (i.e. residential, federal and non-federal). At a minimum, this allocation shall distinguish between shared and non-shared infrastructure (residential versus all other) and any extension or modernization of an individual customer's service point beyond a normal economic standard. The proposed system of accounts shall be made available in electronic format as directed by the Contracting Officer. The Contractor shall populate the sales rate forms provided by the Government.
- The Contractor shall enter into a Memorandum of Understanding (MOU) with the Fort Hood Fire Department for fire protection of all facilities included in the purchase of the utility. The MOU shall be completed during the transition period and a copy provided to the Contracting Officer.
- The Contractor shall abide by Fort Hood fire protection requirements. The utility system purchased by the Contractor may include facilities. These facilities may or may not include fire alarm systems. Where required by federal, state or local regulation, the Contractor shall maintain the fire alarm system for all facilities owned and operated by the Contractor. The Contractor shall permit Fire Department personnel access to their facilities to perform fire inspections and emergency response.
- The Contractor is responsible for all supporting utilities that may be required to own, operate and maintain the electric distribution system being privatized. For example, electricity is needed to operate lift station pumps. Supporting utilities are defined as the supply of electricity, natural gas, water, or wastewater collection and any infrastructure or materials necessary to connect to the supply of electricity, natural gas, water, or wastewater collection. The Contractor shall coordinate with Fort Hood DPW and the Contracting Officer for any supporting utilities to be provided by Government owned utility systems.
- IAW Paragraph C.9.8, *Exercises and Crisis Situations Requiring Utility Support*, the Contractor shall provide support as directed by Fort Hood DPW or equivalent agency for exercises and crisis situations.

J1.4 Current Service Arrangement

TXU supplies power to the three substations that support the electrical demands throughout the Post. TXU also supplies power to the electrical system at BLORA.

J1.5 Secondary Metering

Between the point of delivery and the end user points of demarcation, the Contractor shall own all existing meters and shall install additional meters at new and upgraded locations as directed by the Contracting Officer. Contractor shall install or cause to have installed utility meters as requested by the Contracting Officer to include accessories that will ensure

compatibility with the current Automatic Metering Reading (AMR) system (i.e., Meter Interface Unit, electronic pulse equipment, retrofit kits, etc.). Contractor shall be responsible for all associated metering devices (such as CTs, PTs, wiring, and volt-amp displays). Some existing and future meters (including AMR interface) may be located inside facilities including motor control centers. The AMR will privatized in conjunction with the Fort Hood electric system, not in conjunction with the gas, water, or wastewater systems. The successful offeror for the Fort Hood electric system will operate, maintain and repair the AMR system IAW manufacturer recommendations and/or maintenance schedule.

J1.5.1 Existing Secondary Meters

Tables 11 and 12 list the existing (at the time of contract award) secondary meters that will be transferred to the Contractor. **Table 11** identifies meters that **are not** connected to the AMR system and **Table 12** identifies meters that **are** connected to the AMR system. The Contractor shall provide meter readings for all secondary meters IAW Paragraph C.3, Metering, J3.3, Specific Service Requirements, and J3.6, Monthly Submittals.

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
AAFES Burger King	335	31st and HQ Ave	w side on transformr	72894588
AAFES Pastry Shop	2319	56th and Bn Ave	northwest corner	6526426
AAFES Snack Bar	39014	67th and Support Ave	se me rm on el panel	30908850
AAFES Gas Sta, Main	224	42nd and HQ Ave	north side on pole	96997877
AAFES Maint Off	4261	79th and Santa Fe	east side	52646082
AAFES Maint Off	4261	79th and Santa Fe	e side, behind bush	52646107
AAFES Maint Off	4261	79th and Santa Fe	go down w service dr	59288419
AAFES Maint Off	4262	79th and Santa Fe	se corner	52646147
AAFES Package Store	50006	Clear Creek	south side	60862322
AAFES 1CD	33012	73nd and Battalion	in mech rm, on MCC	31042499
AAFES 2AD	9401	20th and Bn Ave	w side of bldg	80175875
AAFES Shoppette	1002	Hood Rd & HQ Ave	w side,key from empl	79991166
AAFES Shoppette	325	37th and T-D Ave	southeast side	67589428
AAFES Shoppette	325	37th and T-D Ave	nw side on pole	63331633
AAFES Shoppette	52021	Copperas Cove Road	east side	70683398
AAFES Launderette	8314	Martin & Central Dr	south side	50260560
AAFES Shoppette	85001	Martin & Central Dr	south breezeway	92628610
AAFES Shoppete	70012	West Ft Hood		
Alice Roofing	4105adj	Motor Pool Road	on pole s.of trailer	7691078

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
Anderson Columbia	4105adj	Environmental	On pole by trailer	20898866
Army Res Reg Trng Ct	33010	Support Ave & 72nd	west side on xfrmr	82093710
ASAS (JTF) Field Off	90089adj	Mohawk Rd	nw corner on pole	50593451
ASAS (JTF) Field Off	90089adj	Mohawk Rd	south side on xfmr	50609410
Killeen Chamber	C/C Sch.	Hwy 190/Clear creek	On pole W. of sign	52861045
CECOM	453	Dupas Street		
CECOM	451	Dupas st		
Crouch Industries	6898	adj 6898		
CENTEL, OPM	190adj	T-D Ave (Chaffee)	s of Ranch Hse on pl	22798167
CENTEL, OPM	51418adj	Clear Crk & Copperas	n side Cove Rd,brick	20787816
CENTEL, OPM	5500adj	Hoover Rd, Pershing	s side on pole	15590319
CENTEL, OPM	6790adj	24th and T-D Ave	se st corner on pole	22582332
CENTEL, OPM	72002adj	Austin Ave(Montague)	on pole in svc drive	13529160
CENTEL, OPM	Com 3	entrance Comanche 3	on brick enclosure	36531959
CENTEL, OPM	Liberty	adj Main Off,Liberty	brick enclosu,e side	17479167
CENTEL, Office Bldg	11adj	Bldg 11	nw crnr,look thru fc	55382724
CENTEL, OPM	86000	16th & Bn Ave	se corner on pole	25285656
CENTEL, OPM	10050adj	27th and Bn Ave	nw of bldg, on pole	25174385
CENTEL, OPM	14008adj	40th and Bn Ave	ne corner on pole	428827465
CENTEL, OPM	12000	37th and Bn Ave	n side on pole	25309711
CENTEL, OPM	29013adj	67th and Central	n park lot, on pole	49426195
CENTEL, OPM	93022adj	off Clear Creek Rd	adjacent to lift sta	22501377
Commissary (lights)	85020	10th St & Warrior Way	left of mcc	339822
Commissary	85020	10th St & Warrior Way	main meter on mcc	577041
DEH-Hsg (SOQ)	6603	Todd ST (Patton)		48239312
DEH-Hsg (SOQ)	6604	Todd ST (Patton)		49563609
DEH-Hsg (SOQ)	6605	Todd ST (Patton)		45399660
DEH-Hsg (SOQ)	6606	Todd ST (Patton)		41731139
DEH-Hsg (SOQ)	6607	Todd ST (Patton)		41875261
DEH-Hsg (typ elc)	60062	Hammer Spur(Venable)	east side	50670082
DEH-Hsg (typ elc)	51212-1	Maricopa ct (Com 2)	East exterior wall	56325471

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
DEH-Hsg (typ elc)	51212-2	Maricopa ct (Com 2)	East exterior wall	56325470
DEH-Hsg (typ elc)	51213-1	Maricopa ct (Com 2)	South exterior wall	56325475
DEH-Hsg (typ elc)	51213-2	Maricopa ct (Com 2)	South exterior wall	56325474
DEH-Hsg (In Mtr 2)	77012adj	Montague, e dirt rd	1 pole east of trans	73067071
DEH-Hsg (In Mtr 3)	51744adj	Comanche Ave (Com 2)	n side DYA rd,on pol	78478304
DEH-Hsg (In Mtr 3A)	51744adj	Comanche Ave (Com 2)	n side DYA rd,on pol	
DEH-Hsg (In Mtr 4)	51617adj	Cove Rd (Comanche 2)	3rd pole w elev walk	78477457
DEH-Hsg (In Mtr 5)	51414adj	Cove Rd (Comanche 2)	Comanche Ave on pole	49943160
DEH-Hsg (In Mtr 6)	51416adj	Cove Rd (Comanche 2)	n side,pole,opp Comm	94223238
DEH-Hsg (In Mtr 7)	51416adj	Cove Rd (Comanche 2)	n side,pole,opp Comm	94223236
DEH-Hsg (In Mtr 8)	51109adj	Wichita Dr (Com 1)	entr Com 1 on s pole	73067084
DEH-Hsg (In Mtr 10)	159adj	Safi Rd (McNair)	e 100ft on pole	73071228
DEH-Hsg (In Mtr 11)	174	T-D Ave (McNair)	n side of fence on p	43883902
DEH-Hsg (In Mtr 12)	180adj	T-D Ave (McNair)	nw 150ft on pole	73065766
DEH-Hsg (In Mtr 13)	182	T-D Ave (McNair)	on pole by fence	55813114
DEH-Hsg (In Mtr 14)	188adj	T-D Ave (McNair)	on pole s side of TD	55655124
DEH-Hsg (In Mtr 15)	6001adj	Minue Rd (Chaffee)	in alley on pole	73085127
DEH-Hsg (In Mtr 4A)	51617adj	Cove Rd (Comanche 2)	4th pole w elev walk	94538120
DEH-Hsg (In Mtr 19)	60103adj	Wainscott (Venable)	north side on pole	55294226
DEH-Hsg (In Mtr 19A)	60103adj	Bus Hwy 190(Venable)	500m SW o Ft Hood Rd	64445174
DEH-Hsg (In Mtr 20)	5201adj	US Hwy 190(Pershing)	north side in field	73067069
DEH-Hsg (In Mtr 21)	8201adj	Central Dr (Walker)	2nd pole w of qtrs	73067085
DEH-Hsg (In Mtr A)	52005	Entr Rd Comanche 3	300ft s of 1st rt,pl	7994971
DEH-Hsg (In Mtr B)	52101adj	Entr Rd Comanche 3	1st right on pole	75837156
DEH-Hsg (In Mtr C)	52233adj	Entr Rd Comanche 3	6 poles n of Mtr B	5502136
DEH-Hsg (In Mtr D)	52411adj	Entr Rd Comanche 3	w side, opp school	75837177
DEH-Hsg (In Mtr E)	52409adj	Entr Rd Comanche 3	w side of crosswalk	75796959
DEH-Hsg (In Mtr G)	52801adj	Entr Rd Comanche 3	nw crnr of n ballfld	75837150
DEH-Hsg (Kouma Elc)	130adj	Dirt rd & rd to schl	on pole	92658179
DEH-Sub,Clr No. 8 (Montague)	WestSub	West Substation	Master minus School	9999999

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
KISD Montague (Out meter)	83008adj	Clemens Dr	TXU (Out Meter)	02049214
DEH-Hsg (Out Mtr 16)	6790adj	24th and T-D Ave	e 100ft of corner,pl	73071219
DEH-Hsg (Out Mtr 17)	443adj	Dupas St(Wainwright)	east 75 ft on pole	73071208
DEH-Hsg (Out Mtr 18)	5731adj	24th & HQ Av(Wainwr)	e side of st on pole	73067081
DEH-Hsg (Out Mtr 22)	8408adj	Krowse/Carrol(Walker	pole 200ft n of qtrs	78478302
DEH-Hsg (Out Mtr 23)	8666adj	Central Dr (Walker)	last e drivewy, pole	73067083
DEH-MAIN SUB	115	CIR-1	HOOD-TD	10346922
DEH-MAIN SUB	115	CIR-2	HOOD-TD	10347462
DEH-MAIN SUB	115	CIR-3	HOOD-TD	10347486
DEH-MAIN SUB	115	CIR-4	HOOD-TD	10347564
DEH-MAIN SUB	115	CIR-5	HOOD-TD	10347562
DEH-MAIN SUB	115	CIR-6	HOOD-TD	10347493
DEH-MAIN SUB	115	CIR-7	HOOD-TD	10346930
DEH-MAIN SUB	115	CIR-8	HOOD-TD	10347560
DEH-MAIN SUB	115	CIR-9	HOOD-TD	10347520
DEH-MAIN SUB	115	CIR-10	HOOD-TD	10347496
DEH-MAIN SUB	115	CIR-11	HOOD-TD	10347474
DEH-MAIN SUB	115	CIR-12	HOOD-TD	10347485
DEH-MAIN SUB	115	CIR-13	HOOD-TD	10347515
DEH-MAIN SUB	115	CIR-14	HOOD-TD	10347508
DEH-MAIN SUB	115	CIR-15	HOOD-TD	10347544
DEH-MAIN SUB	115	CIR-16	HOOD-TD	10347513
DEH-MAIN SUB	115	FH TOTALIZER 1	HOOD-TD	10346927
DEH-MAIN SUB	115	FH TOTALIZER 2	HOOD-TD	10347492
DEH-MAIN SUB	115	FH TOTALIZER 3	HOOD-TD	10347494
DEH-MAIN SUB	115	FH TOTALIZER 4	HOOD-TD	10347524
DEH-MAIN SUB	115	TU TOTALIZER 1	HOOD-TD	30916462
DEH-MAIN SUB	115	TU TOTALIZER 2	HOOD-TD	31028087
DEH-MAIN SUB	115	TU TOTALIZER 3	HOOD-TD	30870261
DEH-MAIN SUB	115	TU TOTALIZER 4	HOOD-TD	30880774
DEH-Hsg (Liberty Elc)	99999	Dirt rd & rd to schl	on pole	76362918

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
DPCA-BLORA	20105adj	Cottage Rd	N. of bldg, on pole	82835336
DPCA-BLORA	20107adj	Cottage Rd	N. of bldg, on pole	82835294
DPCA-BLORA	20111adj	Cottage Rd	E. of bldg, on pole	82835290
DPCA-BLORA	20140adj	S of Main Rd,on hill	e of Phantom Phlume	82887410
DPCA-BLORA	20118adj	N of Main Rd	Oak Pavillion,e wall	54519660
DPCA-BLORA	20148adj	East end of Main Rd	SW of latrine	82835266
DPCA-Clear Creek GC	52384adj	w end Bn Ave (Com 1)	opp No. 9 tee on bldg	74265358
DPCA-Clear Creek GC	52381	w side of bldg	w side of bldg	64772234
DPCA-Clear Creek GC	52381	Bn Ave (Comanche 1)		50576686
DPCA-Child Care Ctr	113	Hood Rd & T-D Blvd	s side in mech rm	61334124
DPCA-Commu Ctr (CC)	50012	Clear creek rd	in mech. room	D70047
DPCA-Rental center	4930	Clear creek rd	SW corner of Bldg	86348747
DCPA Warrior Lanes	49010	BLDG 49010		
DTH Mgmt trailer	4105adj	Motor Pool Road	on east pole	49762373
FH Nat Bank,CC (sign)	50005adj	Clear Creek	pole 75ft ne of sign	70168782
FH Nat Bank,Teller Ma	2804adj	62nd and HQ Ave	south side	21041552
FH Nat Bank,Teller Ma	325adj	37th and T-D Ave	Northeast side	23223008
FH Nat Bank,Teller Ma	36006adj	Wratten Drive	on pole,e side of rd	35786230
FH Nat Bank,Teller Ma	50004adj	Clear Creek	north side	19764332
FH Nat Bank,Teller Ma	91009adj	Engrs & HQ Aves, WFH	west side	63787742
Cablevision	4609	65th and Railhead	south side	23476992
Force Intergration	22010adj	North ave/53rd st	On pole s/w of trail	01298888
Force Intergration	90089adj	Mohawk Rd	metal bldg, ne pole	49214982
Force Intergration	90089adj	Mohawk Rd	metal bldg, se pole	49214993
FH Mil Credit Union	322	37th and HQ Ave	south side	65245556
Globle Construction	4902adj	Fort Hood	on pole	38620106
Guyco Construction, trl	4105adj	Motor Pool Road	S. side on pole	22993364
Guyco Construction	88037adj	Bn ave and Martin Dr	on trailer north sid	23164440
Guyco Construction	43005adj	Clear Creek	Clear Creek	23165807
Guyco Construction	43005adj	clear creek rd	on pole	49907981
Guyco Construction	43005adj	clear creek rd	on pole	9999A04

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
Guyco Construction	40052adj	Motor Pool Road	south side on pole	82420808
Guyco Construction	40052adj	Motor Pool Road	east side on pole	89242859
AAFES D. Clinic 2AD	330	(35th) and HQ Ave	n side, w of breezwy	62175458
Hensel-Phelps	88040		Dol complex	62609579
DPCA-Hunt & Saddle	69002adj	Hood Rd,opp Railhead	w side of e jmp,pole	82835265
DPCA-Main NCO Club	194	37th and HQ Ave	S. on small xfmr	17969150
DPCA-Main NCO Club	194	37th and HQ Ave	S. side on main xfmr	17969150
DPCA-WFH NCO Club	70005	Base Road, Montague	w service entr, pole	82887412
DPCA-Main Off Pub	5782	24th and T-D Ave	w mech rm, s wall	55232537
DPCA-Main Off Club	5764	24th and T-D Ave	w mech rm, s wall	30971299
DPCA-Main Off Club	5764	24th and T-D Ave	w mech rm, s wall	30971123
DPCA-Main Off Club	5780	24th and T-D Ave	ne metal bldg, w wal	86288566
DPCA-Patton Inn	9212	20th and Central Ave	S. side on xfmr	82887405
DPCA-Sold. Dome sign	50001adj	Clear Crk & T-D Ave	e parking lot, pole	58645423
DPCA-Sports Dome	42000	75th and Bn Ave	se corner on transfr	62177082
Inland Services	56135	Turkey Run Road	s of bldg, on pole	92580682
J.H.L.Construction	4105adj	4105adj		21213920
Meddac	2250	Hq Ave		
Meddac	2255	Hq and Support Ave	on trans southside	16603961
AAFES Popeye's Chick	33011	73rd and Battalion	w side, inside fence	76651324
MW Builders		WEST FORT		
DEH-Hsg (Poxon Hse)	111	Hood Rd	w mech rm by door	55432321
Rust Construction	4105adj	Motor Pool Road	on pole west side	62609242
DPCA-Rod & Gun Club	1937	53rd and North Ave	n side in elec box	29097332
DPCA-Rod & Gun Club	1942adj	53rd and North Ave	e of bldg, on pole	82835388
DPCA-Rod & Gun Club	1943	53rd and North Ave	s side of Skeet bldg	52646120
RCI, Compound	4210			
RCI, Compound	4313			
Rex K Johnson	23020adj	Hq Ave	on pole	37363086
Rex K Johnson	23020adj	Hq Ave	on pole	7323287
Rust Construction	4409			

TABLE 11
Existing Secondary Meters **Not** Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Owner	Bldg. No.	Address	Comment	Meter No.
Santa Fe	4630adj	79th st entrance	on pole RR crossing	18428519
Santa Fe	88008adj	clark rd overpass	on pole E.of overpas	20881998
Syska & Hennessy Construc	4920adj	Spur drive		
SAIC	4105adj	Motor Pool Road	on pole by fence	34657419
Texas Hwy Dept	Hwy 190	CC & Hwy 190	S,side 190 on panel	64828663
Texas Hwy Dept	Hwy 190	CC & Hwy 190	S.side 190 on panel	70470532
Texas Hwy Dept	Hwy 190	Hwy 190&79th st	S.side 190 on panel	27476643
Texas Hwy Dept	Hwy 190	W.side 190&Clear crk	On pedestal bridge	77160677
TEXCOM antennae	90500	s Clr Ck,Mayberry Pk	gravel rd to hilltop	53679894
USA Environmental			MP ROAD AFTER GUYCO	75833572
Universal (- Hsg)	Main Off	entr to Liberty Vil	se corner, class 100	23436816
Universal (admin)	Main Off	entr to Liberty Vil	se corner, class 200	39303428
Universal Services	sewer pl	dirt rd n of Liberty	east side on pole	71666322
Post Office	332	(35th) and HQ Ave	north side breezeway	70405007
BCWCID1, Wtr Mtr Hse	6898adj	end of Coleman Rd	thru s gate on pole	52646124
BCWCID1, Surge Tank	6898adj	North Nolan Road	w of tanks, on pole	37878352
AAFES Car Wash, Main	225	42nd and HQ Ave	west side	51067236
Wimsco,Inc	4105adj	Motor Pool Road	s pole	19513508
WK Jennings	99097adj	Mohawk Rd	on pole by trailer	87936368

Note: The number and location of meters on Fort Hood may change as on-going and projected projects are implemented. The meters presented in this table represent the Army's knowledge of meters as of the publication of this Attachment.

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
120	50278272		General Electric
135			
UID = AAPX0611	64681734		
70003			

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
1970			
39043			
22028			
22028			
4905_1			
180_5	14403647		
420	86163739		
4222	55436184		
4441	55444842		
4902	56725642		
4905_1	55445939		
4905_2	56725636		
4909	50276430		
5258_1	14403648		
5258_2	14403625		
5658_1	14403646		
5658_2	14403642		
5886	14403640		
5891_1	14403643		
5962	14403649		
6449_1	50670086		
6608	45909807		
6610	22788201		
6734	45011590		
6737	14403624		
UID = DEFH2705			
6797			
6799			
6809	14403631		
7015	55444845		
9440	?		

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
33001	30904287		
33003	82804972		
36000_2	30957374		
36000_3	30957083		
36000_4	30951156		
36000_5	30951354		
36000_7	55444858		
36001	55444847		
36007	55444843		
36014	30932809		
36017	5544844		
36019	33445936		
36027	55408177		
36028	55408176		
36030	55408455		
39011	55443234		
39033	55444765		
51452_1	14403632		
51609	14403634		
51764	14403630		
76022_1	58222737		L&G DXMS
76022_2	50278270		L&G DXMS
6222	Not numbered		
6447_1	Not numbered		
6447_2	Not numbered		
6449_1	Not numbered		
6450_2	Not numbered		
6522	Not numbered		
6540_1	Not numbered		
6540_1	Not numbered		
6541_1	Not numbered		

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
6541_2	Not numbered		
6542	Not numbered		
6544_1	Not numbered		
6544_1	Not numbered		
6553	Not numbered		
6560	Not numbered		
6565	Not numbered		
6556_1	Not numbered		
6566_2	Not numbered		
6570_1	Not numbered		
6570_2	Not numbered		
84215_1	81360328		Landis & Gyr
84215_2	81360327		Landis & Gyr
84236_1	81360319		Landis & Gyr
84236_2	81360290		Landis & Gyr
84251_2		81360321	Landis & Gyr
6608	14403629		Schlumber
6610	14403627		Schlumber
6734	36010346		Landis & Gyr
6735	81360351		Landis & Gyr
6737	14403624		Schlumber
6809			
6813			
6822	81360399		Landis & Gyr
6823	Not numbered		
6831	81360391		Landis & Gyr
6851	81360412		Landis & Gyr
150_1	13784880		
150_8	13874869		
157_1			
157_8			

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
71007		81360398	Landis & Gyr
71014		81360397	Landis & Gyr
72013_1		81360347	Landis & Gyr
72013_2		81360348	Landis & Gyr
76006		81360400	Landis & Gyr
76008		81360368	Landis & Gyr
76014		81360363	Landis & Gyr
77006		81360364	Landis & Gyr
77010_1		69430061	Westinghouse
77010_2		69432361	Westinghouse
77018_1		81360333	Landis & Gyr
80004_1		69430680	Westinghouse
81007_1		69430067	Westinghouse
81007_2		69432754	Westinghouse
81008_1		81360413	Landis & Gyr
81008_2		81360416	Landis & Gyr
81009_1		81360415	Landis & Gyr
81009_2		81360414	Landis & Gyr
81010_1		81360350	Landis & Gyr
81010_2		81360349	Landis & Gyr
60006_1		81360361	Landis Gyr
60006_2		81360362	Landis Gyr
60009_1		81360360	Landis Gyr
60009_2		81360359	Landis Gyr
60033_1		81360383	Landis Gyr
60033_2		81360341	Landis Gyr
60048_1		81360353	Landis Gyr
60048_2		81360354	Landis Gyr
60062_2		50670082	Westinghouse
60073_1		81360374	Landis Gyr
60073_2		81360371	Landis Gyr

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
60100_1		39011870	Landis Gyr
51212	81360303		L&D
51213_1	56325475		Westinghouse
51213_2	56325474		Westinghouse
51222	81360289		L&D
51223_1	81360285		Landis Gyr
51223_2	81360304		Landis Gyr
52022		81360320	Landis & Gyr
52107		81360318	Landis & Gyr
52120		81360317	Landis & Gyr
52132		81360301	Landis & Gyr
52123		81360299	Landis & Gyr
52134		81360302	Landis & Gyr
52137		81360300	Landis & Gyr
52205		81360367	Landis & Gyr
52207		81360325	Landis & Gyr
52210		81360369	Landis & Gyr
52211		81360368	Landis & Gyr
52221		81360324	Landis & Gyr
52305		81360385	Landis & Gyr
52310		81360386	Landis & Gyr
52334		81360388	Landis & Gyr
52341		81360326	Landis & Gyr
48557_1	81360292		L&D
48557_2	813602291		L&D
48559_1	81360298		Landis Gyr
48559_2	81360296		Landis Gyr
48560_1	95163221		GE Watthour Meter
48561_1		81360295	L&D
48561_2		81360297	L&D
48562_2		95163220	GE

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
48565_1		81360307	Landis Gyr
48565_2		81360310	Landis Gyr
5712_1		81360311	Landis & Gyr
5736_2		81360314	Landis & Gyr
5773_1		81360313	Landis & Gyr
5773_2		81360312	Landis & Gyr
5860_1		81360332	Landis & Gyr
5860_2		81360333	Landis & Gyr
5868_1		81360334	Landis & Gyr
5868_2		81360331	Landis & Gyr
5886		46339524	Landis & Gyr
5962		14403649	Schlumberger
5781_1		55226305	Westinghouse
5781_2		46339528	Landis & Gyr
5891_1		14403643	Schlumberger
8144		81360356	Landis & Gyr
8145		81360420	Landis & Gyr
8146		91360378	Landis & Gyr
8148		81360375	Landis & Gyr
8151	DOG		
8201		81360340	Landis & Gyr
8102_1		81360419	Landis & Gyr
8206		81360390	Landis & Gyr
8262		81360389	Landis & Gyr
5258_1		14403648	Schlumberger
5258_2		14403625	Schlumberger
5313_1		58684162	L&D
5313_2		58584163	L&D
5318_1		58684159	L&D
5318_2		58684161	L&D
5320_1		58684149	L&D

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
5320_2		58684148	L&D
5465_1		58684151	L&D
5465_2		58684150	L&D
5512_1		58684158	L&D
5512_2		58684157	L&D
5515_1		58684160	L&D
5515_2		58684160	L&D
5544_1		58684153	L&D
5544_2		58684155	L&D
5546_1		58684152	L&D
5546_2		58684154	L&D
5559_1		58684144	Landis Gyr
5559_2		58684146	Landis Gyr
5568_1		58684145	Landis Gyr
5568_2		58684147	Landis Gyr
5607_1		58684141	Landis Gyr
5607_2		58684140	Landis Gyr
5641_1		81360293	L&D
5641_2		81360286	L&D
5642_1		Pulled	
5642_2		Pulled	
5658_1		14403646	Schlumberger
5658_2		14403642	Schlumberger
82206_2	14403628		
83001_1	69430673	14403636	Schlumberger
83001_2	69432685	14403644	Schlumberger
83007_2	69430675		
83008_2	14403645		
84138_1	56725638		DEMS-2S
84138_2			DEMS-2S
84139_1	56725635		DEMS-2S

TABLE 12
Existing Secondary Meters Connected to the AMR System
Electric Distribution System, Fort Hood, Texas

Building	AMR-Serial No.	Body-Serial No.	Model
84139_2	56725637		DEMS-2S
84140	56725641		DEMS-2S
	56725634		DEMS-2S
84141_2	56725644		DEMS-2S
84142_1	38145179		DEMS-2S
84142_2	66725639		DEMS-2S
	56725640		DEMS-2S
85006			
90043	55445937		
1	55445935		
2	57625643		
BLORA	46339565		
WFBANK			
	11658458		SCHLUMBERGER

Note: The number and location of meters on Fort Hood may change as on-going and projected projects are implemented. The meters presented in this table represent the Army's knowledge of meters as of the publication of this Attachment.

J1.5.2 Required New Secondary Meters

The Contractor shall install and calibrate new secondary meters as listed in **Table 13**. New secondary meters shall be installed IAW Paragraph C.13, Transition Plan, and J1.3, Specific Service Requirements. After installation, the Contractor shall maintain and read these meters IAW Paragraphs C.3 and J1.6 below.

TABLE 13
New Secondary Meters
Electric Distribution System, Fort Hood, Texas

Meter Location	Meter Description
There are no new secondary meters required for the Fort Hood Electric Distribution System	

J1.6 Monthly Submittals

The Contractor shall provide the Government monthly submittals for the following:

1. Invoice (IAW G.2). The Contractor's monthly invoice shall be presented in a format proposed by the Contractor and accepted by the Contracting Officer. Invoices shall be submitted by the 25th of each month for the previous month. Invoices shall be submitted to:

Name:	DIRECTORATE OF PUBLIC WORKS ATTN (Barry Barnett- Contracting Command) III CORPS AND FORT HOOD
Address:	4612 ENGINEER DRIVE, ROOM 76 FORT HOOD, TEXAS 76544-5028
Phone number:	(254) 287-3054

2. Outage Report. The Contractor's monthly outage report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Outage reports shall be submitted by the 25th of each month for the previous month. Outage reports shall be submitted to:

Name:	DIRECTORATE OF PUBLIC WORKS ATTN (Bobby Lynn- DPW) III CORPS AND FORT HOOD
Address:	77TH AND WAREHOUSE AVE., BLDG. 4219 FORT HOOD, TEXAS 76544-5028
Phone number:	(254) 287-3054

3. Meter Reading Report. The monthly meter reading report shall show the current and previous month's readings for all secondary meters. The Contractor's monthly meter reading report will be prepared in the format proposed by the Contractor and accepted by the Contracting Officer. Meter reading reports shall be submitted by the 15th of each month for the previous month. Meter reading reports shall be submitted to:

Name:	DIRECTORATE OF PUBLIC WORKS ATTN (Bobby Lynn- DPW) III CORPS AND FORT HOOD
Address:	77TH AND WAREHOUSE AVE., BLDG. 4219 FORT HOOD, TEXAS 76544-5028
Phone number:	(254) 287-3054

J1.7 Energy Saving Projects

IAW Paragraph C.3.4, Energy and Water Efficiency and Conservation, the following projects have been implemented on the distribution system by the Government for energy conservation purposes.

- Solar lighting on parking lot lights
- Geothermal heat pumps

J1.8 Service Area

IAW Paragraph C.4, Service Area, the service area is defined as all areas within the Fort Hood boundaries including the Main Cantonment area, North Fort Hood, West Fort Hood, the Ranges, and BLORA.

J1.9 Off-Installation Sites

No off-installation sites are included in the privatization of the Fort Hood electric distribution system.

J1.10 Specific Transition Requirements

IAW Paragraph C.13, Transition Plan, **Table 14** provides a list of service connections and disconnections required upon transfer.

TABLE 14
Service Connections and Disconnections
Electric Distribution System, Fort Hood, Texas

Location	Description
There are no service connections or disconnections required upon transfer of the Fort Hood Electric Distribution System	

J1.11 Government Recognized System Deficiencies

Table 15 provides a list of Government-recognized deficiencies. The deficiencies listed may be physical deficiencies, functional deficiencies, or operational in nature. If the utility system is sold, the Government will not accomplish a remedy for the recognized deficiencies listed. The Offeror shall make a determination as to its actual need to accomplish and the timing of any and all such deficiency remedies.

Physical and functional deficiencies may require capital to be invested in the system. If any deficiency remedy requires a capital upgrade project, the capital upgrade project shall be proposed according to the following:

- Capital upgrade projects required to bring the system to standard shall be proposed under Schedule L-3.
- Capital upgrade projects required to replace system components shall be proposed in the first years of Schedule L-2 and the cost factored into Schedule L-1 for Renewals and replacements as part of CLIN AA.
- Transition costs shall be proposed as a one-time cost and shall be treated similar to a capital project and included in Schedule L-3.

- Improvements proposed in the operational component of the work shall be included in Schedule L-1 as part of CLIN AA.

TABLE 15
System Deficiencies
Electric Distribution System, Fort Hood, Texas

System Component	Deficiency Description	Type of Project
Regulator – east of guard station on East Range road	Not in use. Does not work - bad circuit board in the automatic controller.	O&M
Regulator – perimeter road of airfield	Lightning damage to the porcelain insulators.	O&M
Regulator – across from Clark road	One phase and neutral have burned.	O&M
Regulator – Turkey Run and Muskogee St.	Not in use. Does not work– gauges are broken out.	Capital Upgrade
Regulator – near Bldg. 51606 on Tank Destroyer road	Not in use.	O&M
Regulator – inside airfield next to building 7041 guard station	Not in use.	O&M
Distribution System	Some components of the electric distribution system are near the end of their projected useful life. Replacement of system components that are beyond their useful lives and are not performing as designed should be made.	Renewals and Replacement

Note:
The electric system as it is currently configured does not need the voltage regulators that are identified as not in use.

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